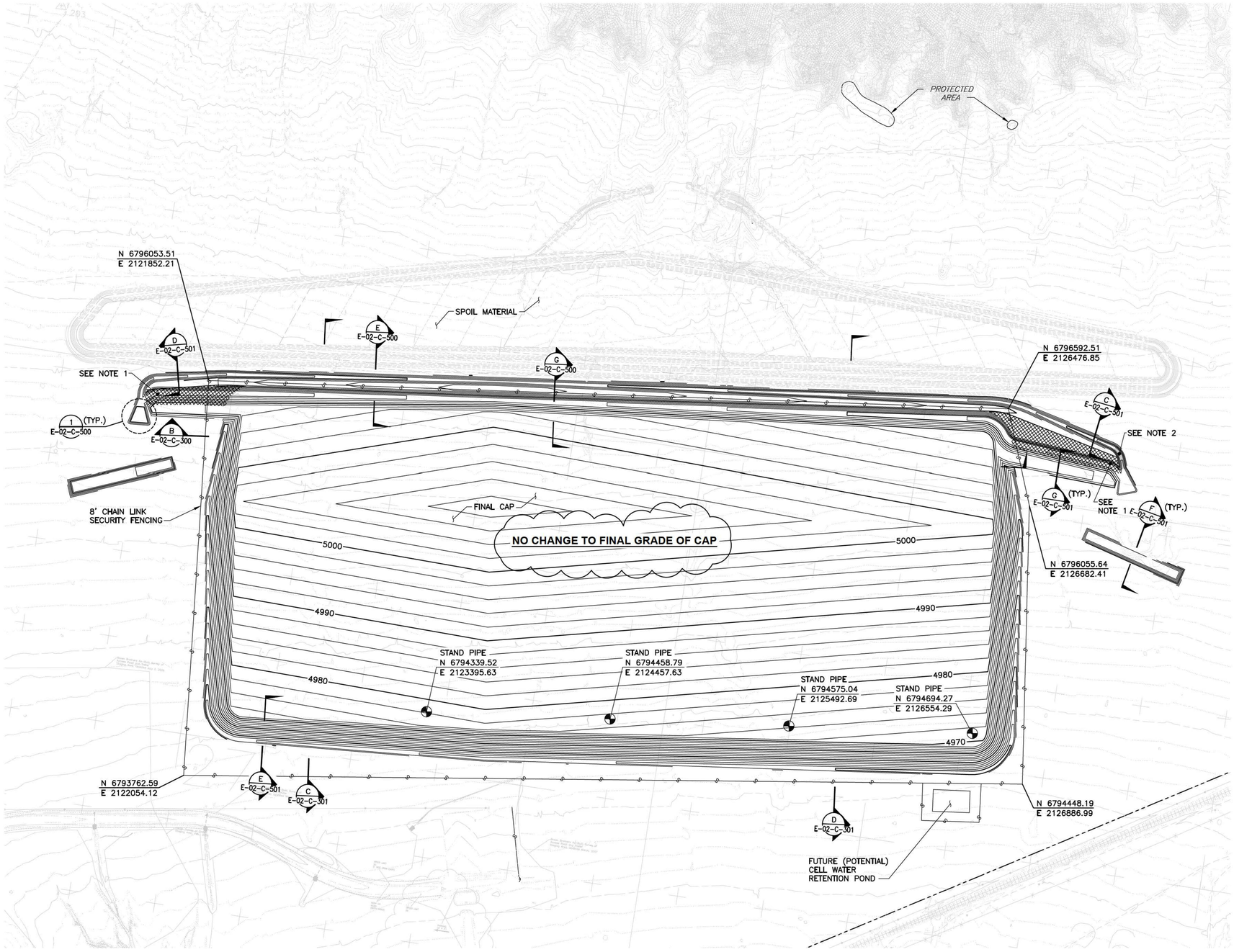
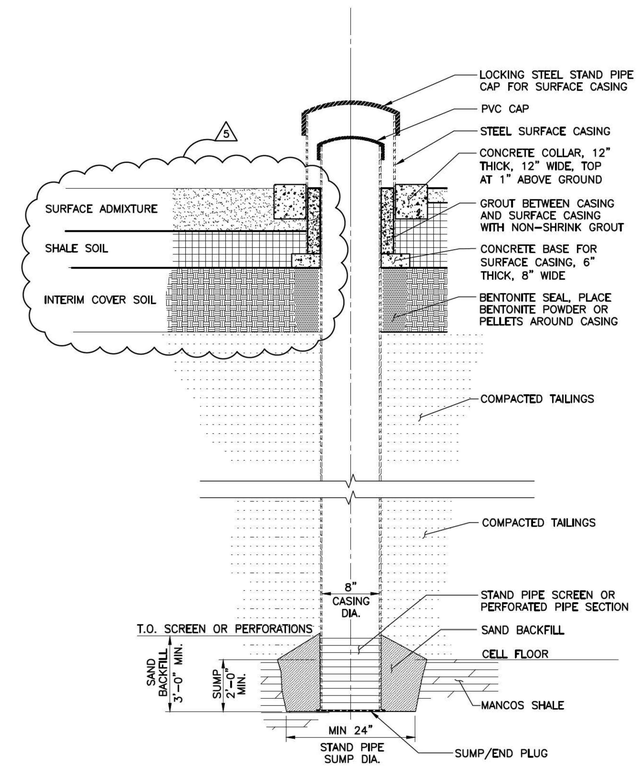




NOTES:

1. TOP OF STAND PIPE SURFACE CASING, 3 FT ABOVE FINAL GROUND SURFACE.
2. TOP OF CASING TO BE 2.5 FT ABOVE FINAL GROUND SURFACE.
3. SURVEY THE AS-BUILT LOCATION AND ELEVATION OF THE TOP OF CASING AND TAG THE STAND PIPE CAP WITH THE COORDINATES, ELEVATION, AND STAND PIPE NUMBER.
4. STAND PIPE NUMBER SHALL BE AS DIRECTED BY THE CONSTRUCTION MANAGER.
5. STAND PIPE CASING AND SCREEN TO BE SCHEDULE 80 PVC WITH THREADED AND COUPLED OR FLUSH JOINT FITTINGS.
6. ANNULAR FILL TO BE CEMENT/BENTONITE GROUT.
7. STAND PIPE SURFACE CASING SHALL BE CARBON STEEL SCH. 40.

STAND PIPE DETAIL
SCALE: NONE

NOTE:

1. AREAS IDENTIFIED IN CLOUDS ARE CHANGES MADE DURING 60% DRAFT DESIGN PHASE.

REVISION NO.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	PROJECT A/E	APPROVAL
5	08/01/21	60% Draft	MWM	SFD	SFD	
4	07/09/08	Draft Changes Due to Replacement of UMTRA Cap	JGA	FMP		
3	04/24/08	Added Quality Assurance Level Notes	LLE	FMP	–	M OAKS
0	12/17/07	Issued For Construction	LLE	FMP	–	–

SEAL

U.S. DEPARTMENT OF ENERGY
GRAND JUNCTION, COLORADO

Work Performed by
Dwyer Engineering, LLC
Environmental, Geotechnical, Civil, Structural Engineering

PROJECT LOCATION: RAP DISPOSAL CELL DESIGN

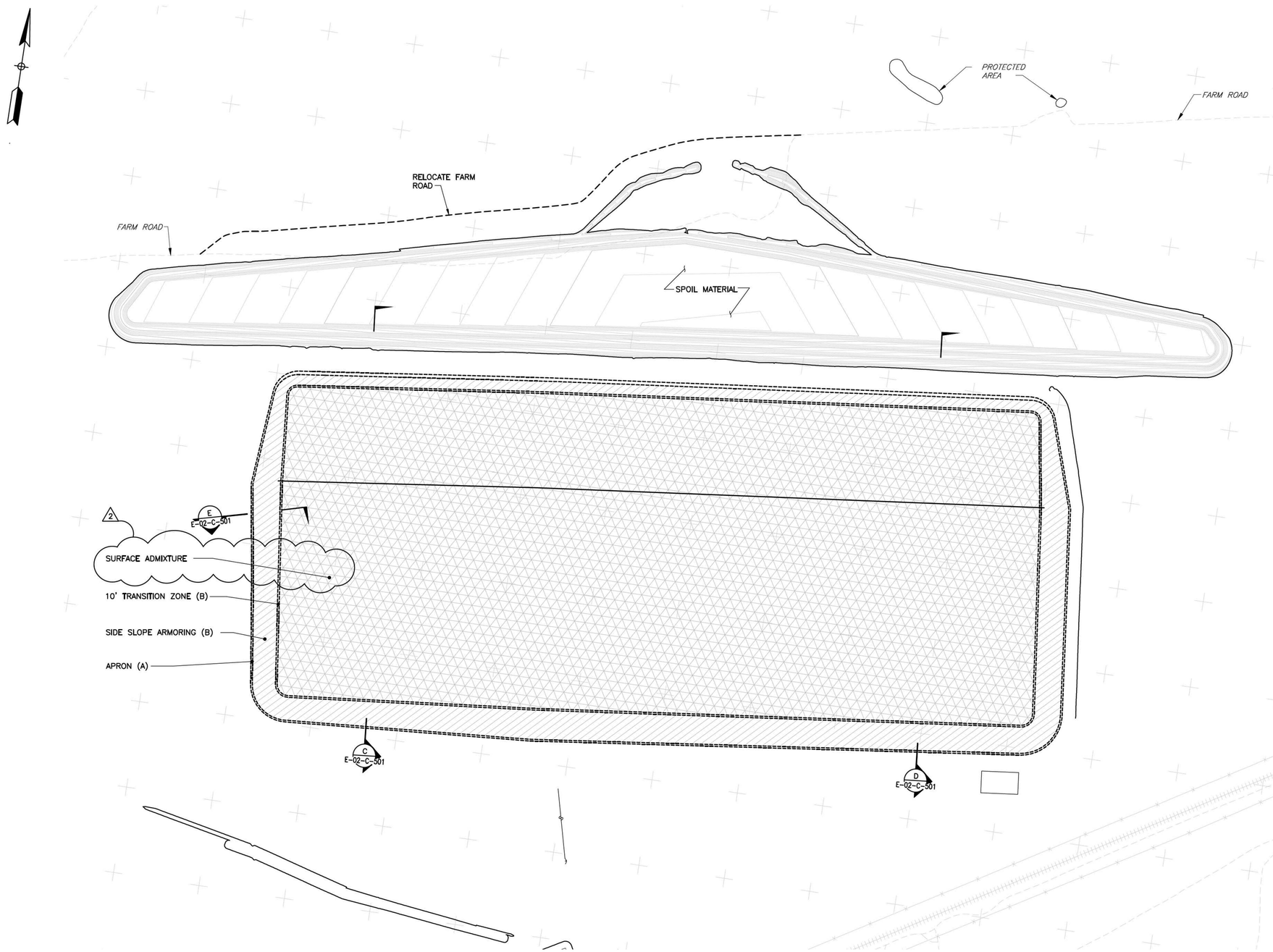
REFERENCE:

APPROVALS		DATE
DRAWN BY:	L ENGLAND	12/17/07
ENGINEER:	F PARTON	12/17/07
PROPOSAL LEAD:	W BARTON	12/17/07
APPROVED BY:	F PARTON	12/17/07
PROJECT MANAGER:	M OAKS	12/17/07
QA MANAGER:	D SMITH	12/17/07

MOAB UMTRA PROJECT

OVERALL CELL CAP PLAN

PROJECT NO.
DRAWING NO. E-02-C-104
SHT. 1 OF 1



NOTE:

1. AREAS IDENTIFIED IN CLOUDS ARE CHANGES MADE DURING 60% DRAFT DESIGN PHASE.

SCALE IN FEET
300 150 0 300 600 900
CONTOUR INTERVAL = 2 FEET

REVISION NO.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	PROJECT A/E	APPROVAL
2	08/01/21	60% Draft	MWM	SFD	SFD	
1	04/23/08	Added Quality Assurance Level Notes	JGA	FMP		
0	12/17/07	Issued For Construction	LLE	FMP	–	–

SEAL

U.S. DEPARTMENT OF ENERGY
GRAND JUNCTION, COLORADO

Work Performed by
Dwyer Engineering, LLC
Environmental, Geotechnical, Civil, Structural Engineering

PROJECT LOCATION: RAP DISPOSAL CELL DESIGN

REFERENCE:

APPROVALS	DATE
DRAWN BY: L ENGLAND	12/17/07
ENGINEER: F PARTON	12/17/07
DESIGNER LEAD: W BARTON	12/17/07
APPROVED BY: F PARTON	12/17/07
PROJECT MANAGER: M OAKS	12/17/07
QA MANAGER: D SMITH	12/17/07

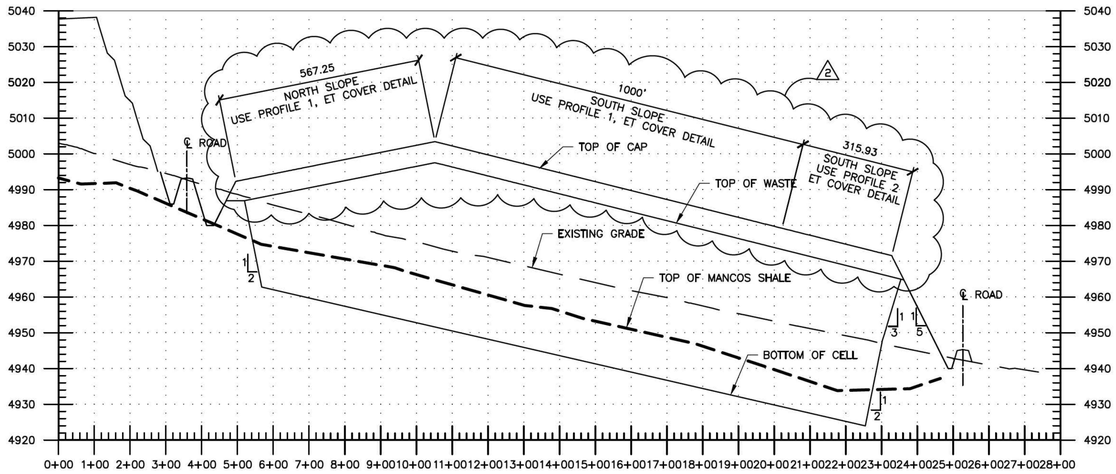
MOAB UMTRA PROJECT

ET COVER PLAN

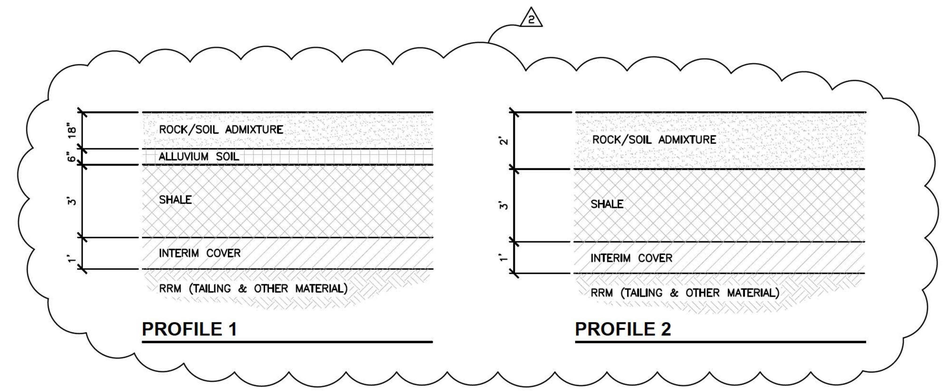
PROJECT NO.

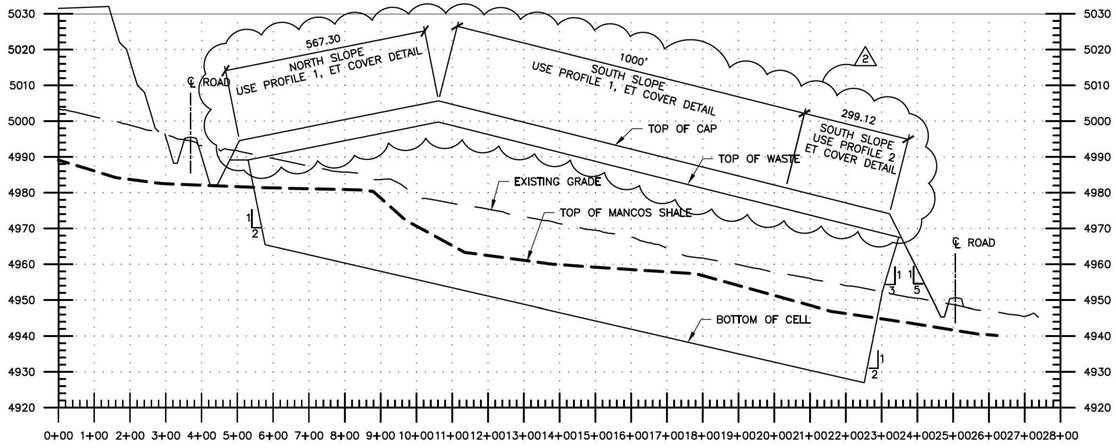
DRAWING NO. E-02-C-105

SHT. 1 OF 1



D **SECTION**
E-02-C-102
E-02-C-103
E-02-C-104
SCALE: HORIZONTAL 1"=200'
VERTICAL 1"=20'

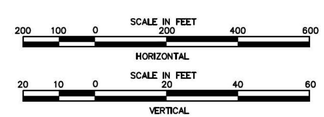




C **SECTION**
E-02-C-102
E-02-C-103
E-02-C-104
SCALE: HORIZONTAL 1"=200'
VERTICAL 1"=20'

NOTE:

1. AREAS IDENTIFIED IN CLOUDS ARE CHANGES MADE DURING 60% DRAFT DESIGN PHASE.



REVISION NO.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	PROJECT A/E	APPROVAL
2	08/01/21	60% Draft	MWM	SFD	SFD	
1	04/23/08	Added Quality Assurance Level Notes	JGA	FMP		
0	12/17/07	Issued For Construction	LLE	FMP	–	–

SEAL

U.S. DEPARTMENT OF ENERGY
GRAND JUNCTION, COLORADO

Work Performed by:
Dwyer Engineering, LLC
Environmental, Geotechnical, Civil, Structural Engineering

PROJECT LOCATION: RAP DISPOSAL CELL DESIGN

REFERENCE:

APPROVALS		DATE
DRAWN BY:	L ENGLAND	12/17/07
ENGINEER:	F PARTON	12/17/07
DISCIPLINE LEAD:	W BARTON	12/17/07
APPROVED BY:	F PARTON	12/17/07
PROJECT MANAGER:	M OAKS	12/17/07
QA MANAGER:	D SMITH	12/17/07

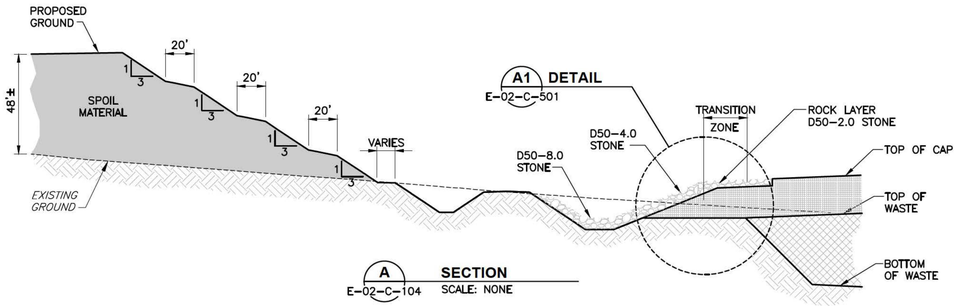
MOAB UMTRA PROJECT

DISPOSAL CELL CROSS SECTIONS

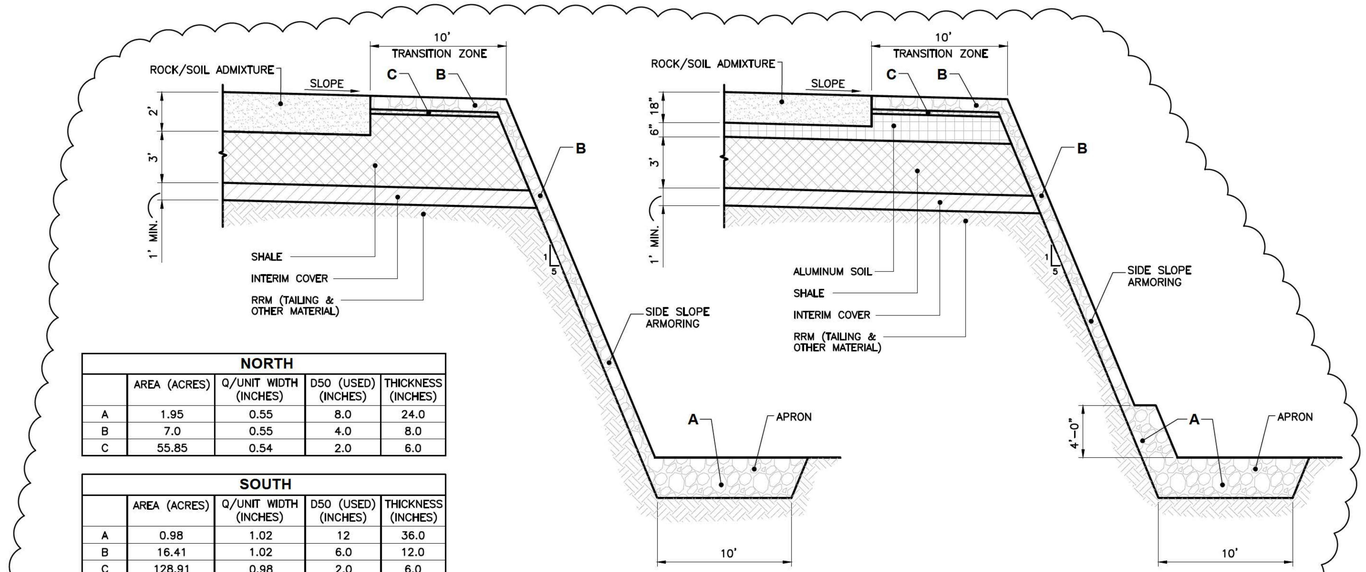
PROJECT NO.

DRAWING NO. E-02-C-301

SHT. 1 OF 1



A SECTION
E-02-C-104 SCALE: NONE



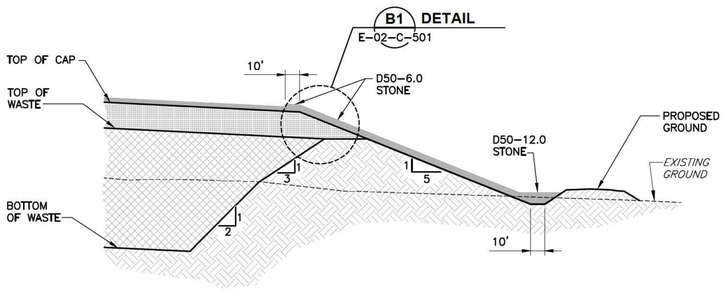
NORTH				
	AREA (ACRES)	Q/UNIT WIDTH (INCHES)	D50 (USED) (INCHES)	THICKNESS (INCHES)
A	1.95	0.55	8.0	24.0
B	7.0	0.55	4.0	8.0
C	55.85	0.54	2.0	6.0

SOUTH				
	AREA (ACRES)	Q/UNIT WIDTH (INCHES)	D50 (USED) (INCHES)	THICKNESS (INCHES)
A	0.98	1.02	12	36.0
B	16.41	1.02	6.0	12.0
C	128.91	0.98	2.0	6.0

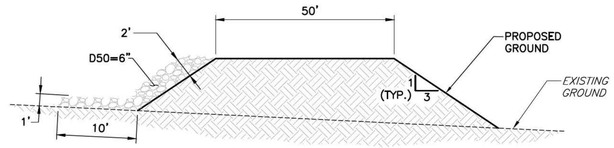
EAST/WEST				
	AREA (ACRES)	Q/UNIT WIDTH (INCHES)	D50 (USED) (INCHES)	THICKNESS (INCHES)
A	1.08	0.2	6.0	16.0
B	13.63	0.2	4.0	6.0
C	NA	NA	NA	NA

E SECTION
E-02-C-104 SCALE: NONE

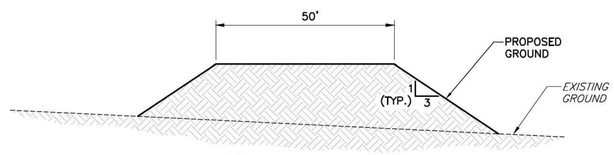
6



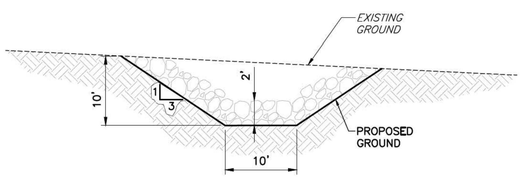
B SECTION
E-02-C-104 SCALE: NONE



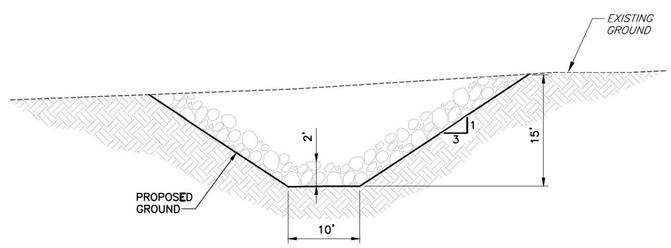
F SECTION
E-02-C-104 SCALE: NONE



G SECTION
E-02-C-104 SCALE: NONE



C SECTION
E-02-C-104 SCALE: NONE



D SECTION
E-02-C-104 SCALE: NONE

NOTE:

1. AREAS IDENTIFIED IN CLOUDS ARE CHANGES MADE DURING 60% DRAFT DESIGN PHASE.

NOTE:

1. REVISION 1 – ADDED UNITS OF MEASUREMENT TO ROCK COVER COLUMNS AND REVISED SECTION A.

REVISION NO.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	PROJECT A/E	APPROVAL
6	08/01/21	60% Draft	MWM	SFD	SFD	
5	05/20/11	Revision Per DCN-21				
4	12/8/09	Revision Per DCN-16	LLE	FMP	WDB	–
0	12/17/07	Issued For Construction	LLE	FMP	–	–

SEAL

U.S. DEPARTMENT OF ENERGY
GRAND JUNCTION, COLORADO

Work Performed by
Dwyer Engineering, LLC
Environmental, Geotechnical, Civil, Structural Engineering

PROJECT LOCATION: RAP DISPOSAL CELL DESIGN

REFERENCE:

APPROVALS		DATE
DRAWN BY	L ENGLAND	12/17/07
ENGINEER	F PARTON	12/17/07
DISCIPLINE LEAD	W BARTON	12/17/07
APPROVAL BY	F PARTON	12/17/07
PROJECT MANAGER	M OAKS	12/17/07
DC MANAGER	D SMITH	12/17/07

MOAB UMTRA PROJECT

DETAILS – 2

PROJECT NO.

DRAWING NO. E-02-C-501

SHT. 1 OF 1